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White House Space Plan Cool on Manned Program

Man in space—for decades the glory and budget buster of the US space program—receives curiously ambiguous treatment in a major statement on National Space Policy issued September 19 by the White House.

For between-the-line readers, the document is especially interesting on the eve of what looks like the coming of a second Clinton Administration. The product of an inter-agency review by the National Science and Technology Council, the statement is described as the first post-Cold War policy guide for civil, military and commercial goals in space. It came out about a year later than expected, which suggests difficulty in arriving at substance and text.

Among the goals listed is to "Enhance knowledge of the Earth, the solar system and the universe through human and robotic exploration." But the policy statement makes no reference to a manned mission to Mars, or anywhere else, not

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even in terms of merely studying the possibilities. On the misbegotten manned Space Station, which is too far along to kill or shrink further, the wording tends to opacity.

Listing among NASA's responsibilities "human space flight to conduct scientific, commercial, and exploration activities," the statement adds that to "enable these activities," NASA will "Develop and operate the International Space Station to support the unique attributes of humans in space and establish a permanent human presence in orbit." Then it appears to step back by stating that the Space Station "will support future decisions on the feasibility and desirability of conducting further human exploration activities."

The policy statement declares "a strong commitment to space science and Earth science programs." But the emphasis is on robots and instrumentation, including "a robotic presence on the surface of Mars by the year 2000," and "innovative new technologies" to obtain "sample returns from the celestial bodies in the solar system."

Running over budget as appropriations for space continue to decline, the Space Station and its shipping service, the Space Shuttle, consume over half of NASA's funding. With no real mission, scientific or technical, the project survives on pork and politics and as a helping hand to the decaying ex-Soviet space establishment.

National Space Policy (15 pp.) is available without charge from: Office of Science and Technology Policy, Old Executive Office Building, Room 428, Washington, DC 20502; tel. 202/456-6020; fax 202/456-6019.

R&D Ratings for Congress Called Misleading, Divisive

Many interest groups do it, so why shouldn't the scientific community rate Congressmen on the basis of votes friendly or unfavorable to its heartfelt interests, notably, plentiful and unencumbered appropriations for research? No reason at all.

Now it's been done, by a new outfit that calls itself Science Watch, Inc., created by 10 eminences of the science establishment (see box, P. 2). But even before the unveiling of their "Science ScoreBoard," on September 18, recriminations were zinging around Washington about the propriety of science ranking its masters on Capitol Hill. Criticism was also directed at the accuracy of the ratings—which show Democrats far ahead of Republicans in support of science.

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In Brief

The overall picture on federal research budgets for the fiscal year that dawns today, FY 1997, remains cloudy because of unfinished business on Capitol Hill. But, despite many grim forecasts, or maybe because of lobbying mobilized by them, R&D will come out more or less intact. NIH is alone in the real growth parade, while most other agencies will remain level in real terms or receive small decreases (see Page 6).

As far as public recognition is concerned, NIH possesses an invisibility that the Pentagon might envy, according to a survey in California commissioned by Research!America, a Washington-area lobby for biomedical research. Though the state is a leading destination for NIH grants, 84 percent of the respondents could not name the government agency that supports medical research, whereas nearly all knew that NASA runs the space program.

NIH has urged grantees to identify their benefactor when going public with research results, but the source of funding rarely shows up in press and TV reports on medical developments. Oddly, though, NIH keeps growing while NASA is shrinking.

The National Academy Press, the prolific publishing house of the National Academy of Sciences, has gone online with 1000 full-text scientific, technical and policy publications and expects to reach 5000 by the end of 1997. The service, available without charge, can be reached on the Internet at: <HTTP://WWW.NAP.EDU> or through American Online via the keyword NAS.

New definition of a university president, as reported by White House Science and Technology Advisor John Gibbons in a recent talk: Someone who lives in a big house and begs.

... An Attempt to 'Politicize Science,' Walker Charges

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In other settings, such ratings are intended as voting guides. But that's not the intention here, say the producers of Science ScoreBoard, who insist that the purpose is merely to identify Congressmen who might benefit from missionary work by scientists explaining the importance of research. Science ScoreBoard, they say, is an educational tool, not a political weapon.

The science establishment, generally receiving bipartisan political support, has traditionally shunned the rating tactic as divisive and unnecessary. But, as Samuel Johnson said, the prospect of the gallows concentrates the mind. With Congress and the White House committed to deep cuts in domestic spending, aloofness from politics has therefore undergone a reconsideration within the scientific community.

The day after the ScoreBoard was issued, the top Republican for research affairs in the House, Science Committee Chairman Robert Walker, declared the ratings were misleading and contaminated by "overt subjectivity" in an attempt to "politicize science." And Neal Pings, President of the Association of American Universities—the Washington outpost for big academic science—warned that the scoring venture "is a serious mistake and may anger members of Congress who have been among the best friends of scientific research."

Even before the ratings were made public, a row broke out among Washington science-policy *apparatchiks* about the wisdom of ranking the votes, the accuracy of the tabulations, and whether the 10 founding mandarins trading as Science Watch, Inc., knew what they were doing when they attached their distinguished names to the ratings. The scoring, covering 30 votes in each of the first and second sessions of the 104th Congress, was confined to the 435 members of the House. A text accompanying the vote tabulations stated that "Democrats in the House (at 72 percent average) supported science on these indicator votes about twice as frequently as the Republicans (35 percent average)." The Senate was left out of the scorekeeping exercise, at least this time, Science Watch explained, because that chamber often favors big omnibus bills in which separate items are difficult to track.

The critics were particularly aggrieved by the low rating for Rep. John Porter, the Illinois Republican who is worshipped by the biomedical-research community as the guardian of funding for the National Institutes of Health. By the ScoreBoard's count, however, Porter was on the right side of science votes only 33 percent of the time last year and 45 percent this year. In contrast, Democrat George Brown of California, long a close ally of the science establishment, came in with 89 and 100 percent. Brown's successor as Chairman of the Science Committee, the irate Congressman Walker—who rates himself a strong supporter of science—was scored at a measly 37 and 45 percent.

Science Watch, Inc., is spiritually an offshoot of the Washington-based Council of Scientific Society Presidents

The Scorekeeping Ten

The following are named in a Science Watch press release as founding members of the organization:

Roland Schmitt, Chairman, former Chairman of the National Science Board, ex-Senior VP for research at GE and former President of Rensselaer Polytechnic Institute.

James Duderstadt, former President of the University of Michigan and ex-Chairman of the National Science Board.

D. Allan Bromley, Dean of Engineering, Yale University; White House Science and Technology Advisor under President Bush.

Erich Bloch, former Director of the National Science Foundation.

Maxine Singer, President of the Carnegie Institution of Washington

Nobel laureates: Kenneth Wilson, F. Sherwood Rowland, Herbert Simon, Gertrude Elion and Leon Lederman.

According to Science Watch Chairman Martin Apple, the group provided a total of \$2500 to launch the organization.

(CSSP), comprising the heads of some 30 scientific and professional associations. The Council holds non-profit status and is therefore barred from political activity. Science Watch, however, is incorporated in Delaware as a profit-seeking corporation, and thus is free to engage in political activities. Such legalistic creations are common among nonprofits delving into politics, but rare if not previously unknown among scientific societies.

The CEO of Science Watch is Martin Apple, PhD, who is also Executive Officer of the Council of Scientific Society Presidents.

Chairman Roland Schmitt of Science Watch is the incoming President of the Council.

Before going public at press briefing on September 18, Apple previewed the ScoreBoard at a meeting on September

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...More Tallies Coming, Says Head of Science Watch

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12 of Washington-based representatives of academic and research organizations. Alarms went off at once, leading to the circulation of a memorandum stating that "some members [of Congress] who can hardly be considered anti-science fared very poorly in the rating."

The memo stated that "Apple has formed some sort of dummy organization to front as the sponsor of this rating exercise," and, referring to several of the prominent names associated with the scoring venture, the memo said that one attendee at Apple's briefing "found it hard to believe that these individuals understood what they had gotten themselves into, or would support what Apple was doing if they did understand."

Schmitt told SGR that he had reviewed and approved the rating report prior to its public release. Copies had been sent to all others in the founding 10, he said, and no quibbles had been heard. The ScoreBoard was created, Schmitt said, because "I and a lot of us are convinced that the well-being of science can no longer be handled by science walking the halls of Congress and the beltway"—a reference to the well-established tactic of scientists visiting Capitol Hill to plead for federal support of research. "That's still necessary, but not enough," Schmitt added, noting that despite these past efforts, "Congressmen still say we don't hear from your people."

The ScoreBoard, he continued, "will increase the sensitivity of members of Congress to the well-being of science" and "capture the interest of the scientific community."

Criteria for the Ratings, and the Top Science Backers

Science Watch says it based its rankings on 30 votes during the 104th Congress, up to the August recess, with the issues at stake "selected as indicators because they did one or more of the following:

1. favorably or unfavorably impact the quality review of science,
2. proscribe or prohibit specific types of scientific research,
3. eliminate or increase science needed for national decision-making,
4. promote or curtail science education,
5. directly increase investment or decrease investment in science."

According to these criteria, Science Watch reports, the top 20 House members, plus ties, in support of science in each party were:

Democrats: John Murtha, Pa.; Sheila Jackson-Lee, Texas; Eddie B. Johnson, Texas; Ronald Coleman, Texas; Martin Frost, Texas; Kiki de la Garza, Texas; Allan Mollohan, W. Va.; Joe Moakley, Mass.; Robert Bud Cramer, Ala.; Vic Fazio, Calif.; Solomon Ortiz, Texas; Ken Bentson, Texas; Rick Boucher, Va.; George Brown, Calif.; Steny Hoyer, Md.; Tom Bevill, Ala.;

Despite the political scent arising from Schmitt's description, he insisted that the purpose is to educate rather than to reward friends of science and punish the others. The critics fail to recognize, Schmitt said, that "we've developed an additional piece of information" that can benefit science and the nation. Schmitt said emphatically that Science Watch will produce more Congressional ratings.

In a letter to Apple, House Science Chairman Walker strongly criticized the rating methodology as faulty and misleading. Noting that many science votes, such as authorizations for the National Science Foundation, NASA and the Department of Energy, were not considered in making the rankings, Walker observed: "These votes are missing because these bills passed by voice vote, indicating that there was broad, bipartisan support for these measures aimed at ensuring that the basic science base of this nation remains strong and healthy."

Walker also hit at funding votes as a meaningful yardstick of support for science, stating in his letter that "the science community needs to recognize that a vote against increased spending or for termination of a program doesn't mean a Member is anti-science; it means that he had to make a decision in the context of a larger picture. For instance," Walker continued, "I have made it the [Science] Committee's priority to focus on basic research—the development of new knowledge—because I believe that's the best use of federal dollars."

With sniping coming from within and without the sci-
(Continued on Page 4)

Gene Green, Texas; William Jefferson, La.; Ray Thornton, Ark.; Norman Dicks, Wash.; John Bryant, Texas; Jim Chapman, Texas.

Republicans: James Hayes, La.; Nancy Johnson, Conn.; Jim Greenwood, Pa.; Tom Davis, Va.; James Walsh, NY; Paul Gilmore, Ohio; Jim Bunn, Oregon; Steven LaTourette, Ohio; Peter King, NY; William Thomas, Calif.; Ken Calvert, Calif.; Amo Houghton, NY; Sherwood Boehlert, NY; Constance Morella, Md.; William Clinger, Pa.; C.W. Bill Young, Fla.; Vernon Ehlers, Mich.; Herbert Bateman, Va.; Wayne Gilchrest, Md.; Michael Bilirakis, Fla.; Steve Horn, Calif.; Philip English, Pa.

Science Watch says each Democrat on the list voted in support of science on at least 88 percent of the 30 indicator votes; the Republicans came in at 50 percent or more. No explanation was available for the abundance of Texans among the Democrats—10 in a field of 22.

Copies of Science ScoreBoard, with the ratings and explanatory text, are available for \$5 each from: Science Watch Services, Inc., PO Box 33999, Washington, DC 20033; or by telephone from Chairman Schmitt's office: 518/384-0965.

NAE Aiming for Reforms Proposed by Ousted Chief

Approaching its first annual meeting this week since it kicked out its troublesome President last spring, the National Academy of Engineering appears bound for a number of basic reforms—ironically, along the lines advocated by the deposed Harold Liebowitz [SGR, July 1: "By Huge Margin, NAE Votes to Oust Its President"].

His interim replacement, William Wulf, a sunny and candid computer engineer on leave from the University of Virginia, acknowledged in a meeting with reporters last month that Liebowitz was right about a lack of openness and broad membership participation in NAE affairs. The difference, he said, is that Liebowitz was ineffective in seeking reforms, "but I'm really trying to do it."

Echoing one of Liebowitz's central criticisms about the governance of the NAE, Wulf said he would seek to restructure the nominating procedure for NAE elections. Under the present system, the NAE Council appoints the Nominating Committee, which, in turn, selects candidates for the Council, which consists of the President and other senior officers and 18 councilors. By custom, the nominating system produces one candidate per office, in banana republic style.

Ignored by the Nominating Committee, Liebowitz twice got on the ballot through the cumbersome petition method and won election, 697-660, in 1995. However, his lone-wolf style, secretiveness and lack of cooperation with the National Academy of Sciences, the senior partner in the Academy complex, led to a recall vote of 1179-179.

The nominating method "is responsible for the image of a closed system," Wulf said at a luncheon meeting on September 12 that he initiated with the press. To replace it, he said, he will ask the Academy to give each of the NAE's 12 disciplinary sections authority to appoint two members to the Nominating Committee—one from industry and one from universities. The issue of multi-candidate elections would be referred to a blue-ribbon panel that would also look into a variety of other matters, including criteria for electing

Congressional Votes

(Continued from Page 3)

tific community, the Science Watch, Inc., rating system has flopped at its debut. The low scoring for NIH benefactor Porter is the product of robotic numerology that is technically correct, but awesomely misleading.

The difficulty, however, isn't inherent in rating Congressional votes. Given the confusion and camouflage that are often involved in committee and floor votes, it can be difficult to sort out the positions of 435 Representatives and 100 Senators on scores if not hundreds of issues. Apple said the vote counts were made during the summer by a graduate student, plus some part-time assistance—surely not enough for the job.

With proper resources and sophistication, the scorekeeping job can be done well. The basic question, however, is whether the scientific community will be better off for doing it.—DSG

members to the NAE.

In response to a question, Wulf said he hoped to do something about the paucity of women members in the NAE—currently 36 out of a total of 1822 members. The low representation of women results from "a lot of interacting issues," he said, particularly their relatively limited numbers in the engineering profession. But when asked whether "eligible women are not taken into the NAE," he answered without hesitation, "Yeah."

Wulf was emphatic about the importance of maintaining close ties between the Academies of Science and Engineering. Liebowitz, he noted, had approached federal agencies for study contracts to be conducted exclusively by the NAE, in violation of a longstanding agreement for the two Academies to work together through the jointly operated National Research Council.

Asked how he arrived in the unprecedented role of Interim President of the NAE, Wulf said he was recruited by a member of the NAE Council, Erich Bloch, who was Director of the National Science Foundation while Wulf did a two-year stint there in the 1980s. He said he did not know whether he would be a candidate for the full-fledged Presidency of the NAE, noting that he had taken a 12-month leave from the University of Virginia, and at present was planning to return there. One factor, he said, would be whether the Council opted for a contested election, since the interim President as solo candidate would be counter to the spirit of openness that he was trying to promote. Wulf did not rule out a run for the Presidency.

Was Liebowitz—who hasn't answered press inquiries since the recall vote—taking legal action against the NAE, as he strongly hinted he would when the ouster movement was organizing? Wulf said, "I can't answer that," adding that "I've been advised by the legal beagles not to discuss that."

Wulf said that the NAE's position is that Liebowitz was officially removed from office at the end of June. "He contests that," Wulf said without explanation. Asked whether Liebowitz had filed a suit against the NAE, Wulf said, "No." He then volunteered, "I think it would be in everybody's interest for there to be some kind of settlement between Hal and the Academy."

Wulf said that when he came aboard last June, his most important goal was to reestablish the confidence of the NAE members, financial sources and the federal agencies that sponsor studies by NAE members. He said he believed that a great deal of progress had been made. The quest for independent funds—permitted for special studies by each Academy—was stymied during the Liebowitz period, Wulf said, but he hopes to get it going again, with the aim of a major increase in the NAE endowment.

Asked whether he had encountered protests from Liebowitz's allies in the NAE ranks, he reported "a number of verbal expressions of concern," but nothing more and no resignations.

Non-Profit Pay Checks

Association of American Universities

While the pursuit of growth comes naturally to bureaucracies, the Association of American Universities derives cachet as a boutique operation. Founded in 1900, the AAU numbers just 60 universities, leaving out more than a few that have indicated interest in joining up.

With a roster that includes Harvard, MIT, Stanford, UC Berkeley, Chicago, etc., the AAU serves as the Washington observer and lobby for big-league academic research mainly outside of the health area, a territory it overlaps with the far bigger and richer Association of American Medical Colleges [SGR, August 1]. The current membership fee is \$40,000 per institution, except for the two Canadian members, McGill and Toronto, which pay \$4000 each.

On issues of research budgets, indirect costs, laboratory regulations and other items of grave concern to academic administrators and researchers, federal agencies customarily receive the AAU's input, whether volunteered or invited. The outcome is another matter, but the AAU usually gets a place at the table, a coveted first step in Washington advocacy operations. In the current Congress, the AAU has been particularly active in support of easy immigration to American campuses for foreign academic stars.

In staff size, the AAU is also small, numbering only 18 employes, operating on a budget last year of \$2.4 million, according to its latest IRS Form 990, the tax form—open to public inspection—for organizations holding non-profit, tax-exempt status under chapter 501(c)(3) of the Internal Revenue code. The return, for tax year 1994, covers the AAU fiscal year ending September 30, 1995, and was filed in May, following a routine extension of time for preparation.

By the Washington yardstick of depressed civil service compensation, the 1994 return shows ample pay and perks for the head man, AAU President Cornelius J. Pings, Provost at the University of Southern California prior to becoming AAU President in 1993. The rewards for senior subordinates at the AAU are on a far lower scale.

The AAU reported that Pings received \$215,000 in pay; \$22,705 under the heading of "benefit plans and deferred compensation," and \$7915 under "expense account and other allowances." In the previous year, the perks were the same and the comparable figures were \$205,000, \$18,935 and \$7246.

As was the case with his predecessor, Robert Rosenzweig, Pings is provided with a residence on the downtown Washington strip of Massachusetts Avenue known as Embassy Row. The tax return states that the President resides in the Association-owned house "as a condition of his position," adding that "Various activities directly related to the interest of the Association are engaged in at the residence." A depreciation table on the tax return appears to value the residence at \$518,442, but the market value of the stylish row house is probably far higher. In addition, the AAU Presidency comes with a car, valued at \$23,479 on the tax return.

In 1995, after less than two years in office, Pings an-

nounced his intention to resign the AAU Presidency in expectation of election to the Presidency of the National Academy of Engineering, another choice job on the non-profit landscape. When the NAE voters decided otherwise, Pings was receptive to the AAU's request to stay on.

Along with Pings, the only other entry on the 1994 tax return under the heading of Officers, Directors, Trustees and Key Employes is for Vice President Howard J. Gobstein—compensation, \$127,013; benefits, etc., \$19,282; nothing reported for expenses. Reflecting the close ties between the federal science-policy apparatus and its Washington monitors, Gobstein spent part of the year on loan to the White House Office of Science and Technology Policy, which reimbursed the AAU \$78,742. He has since become Washington representative for Michigan State University.

Under the heading Compensation of the Five Highest Paid Employes Other Than Officers, Directors, and Trustees, the AAU reported on the 1994 return as follows in three categories—compensation, contributions to benefit plans and deferred compensation, and, where applicable, expense and other allowances:

Maureen Byrnes, Director of Federal Relations for Biomedical Policy, \$116,000, \$15,651, \$1315.

John Vaughn, Director of Federal Relations, \$115,000, \$20,375.

Peter F. Smith, Director of Public Affairs, \$93,000, \$15,838.

Joan Kindred, Administrative Assistant to the President, \$51,000, \$10,386.

Karen Wooten, Office Manager, \$51,000, \$8776.

For the top five employes, raises from the prior year ranged from 3 to 8 percent.

Access to precious information and an opportunity to join together on common issues are generally regarded as the tangible benefits of AAU membership. Some Washington insiders scoff at that perception as lobbyists' fluff for the home office. Nonetheless, AAU membership is regarded in some quarters as a badge of accomplishment.

Several years ago, when the State University of New York at Buffalo was admitted as part of a small expansion of AAU membership, the *New York Times* editorially hailed the university for making the grade. Last year, in one of the very occasional expansions of the ranks, Emory University and UC Santa Barbara were admitted. With the member universities proud of the AAU's exclusiveness and manageable scale, getting in is tough. Admission requires the approval of three-quarters of the members.

Previously published SGR Pay Checks: Howard Hughes Medical Institute, April 15; National Academy of Sciences, May 1; American Chemical Society, May 15; American Psychological Association, June 1; American Association for the Advancement of Science, June 15; American Psychiatric Association, July 1; Association of American Medical Colleges, August 1; American Council on Education, September 15.

Next: Pharmaceutical Research and Manufacturers of America

GOP Plan to Cut R&D Thwarted, Brown Says

Good sense, luck and lobbying spared research from the drastic budget cuts that Republicans endorsed when they took control of Congress last year, according to an analysis by Rep. George Brown (D-Calif.), former Chairman of the House Science Committee.

As a result, he calculated, appropriations for civilian research have remained flat at around \$33 billion a year for the past couple of fiscal years, though in "real" terms, there was a net loss to inflation of about 7 percent. Even so, the outcome was a \$6.5 billion "windfall" above the Republicans' budget-cutting plan, which called for spending reductions totaling nearly 20 percent in fiscal years 1996-97.

Brown, in an end-of-session press briefing on September 25, asserted that the "windfall" was not the inevitable result of affection for science prevailing over deficit-cutting politics. "The fact is," he said, "a different set of political leaders and circumstances might well have reinforced the projected 20 percent cuts."

The steady growth in the budget of the National Institutes of Health, he said, was the work of "two extremely supportive Republican Appropriators"—Rep. John Porter and Senator Mark Hatfield—in tandem with

biomedical caucuses in both houses, Presidential backing, "and the most sophisticated lobbying team in the R&D community."

Reflecting on the vagaries of political placement and influence, Brown said, "Substitute a Republican White House and a Senator other than the retiring Mark Hatfield as Chairman of the Senate Appropriations Committee and it is highly unlikely that NIH funding would have exceeded the budget resolution by anything close to \$2.5 billion."

Brown added that severe budget reductions for the Department of Energy were fended off by veto threats and because "Moderate Republican Appropriations Chairmen in both the House and Senate could count on a solid Democratic front in fights against draconian cuts to fossil, conservation, and renewable energy programs."

If re-elected with a Democratic majority, Brown is a shoo-in to regain the Science Committee chairmanship, now held by Rep. Robert Walker, of Pennsylvania, who is retiring at the end of this session. The two legislators have not got on well.

Asked at the briefing whether he will miss Walker, Brown replied, "Like a toothache."

In Quotes: The Crisis of Morale in Scientific Research

From "A Crisis in Scientific Morale," by Robert Pollack, Professor, Department of Biological Sciences, Columbia University, at a symposium on "Science in Crisis at the Millennium," September 19 at The George Washington University.

High scientific morale requires a social structure of friendship and collegiality which, in my experience, no longer exists for most of my colleagues.... As they reach an age and situation where "peer review" means being judged by colleagues younger than their children, the absence of social structures that would validate anything about them beyond their latest papers, makes for a reproducibly sad moment of isolation that often leads to bitterness and one or another kind of weird, obstructive behavior....

Why help a post-doc to get started as an independent scientist, if you are going to be competing with that person a few months after they leave your lab? Why share data or materiel—why let someone clone by phone, as the saying goes—if your stuff has the chance of being patented; why admit fears if the person you are talking to may have to decide an aspect of your fate? Why, in other words, care about anyone else, or expect to be cared about in turn?

As a result of this diminished and cynical view of human relations, the education of many young scientists is deeply defective. Graduate and post-doctoral programs are a bit like high-school and college basketball programs, with a tenured job at a major research university being the equivalent of an

NBA offer. The low to vanishing probability of either the professorship or the starting position are known to college coaches and directors of training grants alike, and both manage to avoid telling the quantitative truth to the young people from whose work they and their senior colleagues maintain their productivity and reputation. It is exceedingly rare to find an example of a mid-career, tenured university scientist who gives any students—undergraduate, graduate, post-doc—a reasonable estimate of the tiny chance they have to become a tenured university scientist in turn. It is not the student, but the mentor, who reveals his or her demoralized state by assiduously avoiding the topic.

Job Changes & Appointments

Kenneth Shine has been appointed to a second five-year term as President of the Institute of Medicine, the health-policy wing of the National Academy of Sciences. The appointment was made by NAS President **Bruce Alberts** upon the recommendation of the IOM Council. The new term is effective July 1.

At the vacancy-riddled National Science Foundation, **Elbert L. Marsh** has moved up from Deputy Assistant Director of Engineering to Acting Director of the Engineering Directorate, succeeding **Joseph Bordogna**, who is serving as Acting Deputy Director, the number two post in the Foundation, following the departure of **Anne Petersen** last month for the W.K. Kellogg Foundation.

In Print

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From the American Psychological Association:

Directory of Experts: News Sources With Expertise in Psychological and Behavioral Science (80 pp., no charge), though intended for journalists seeking guidance, or, more likely, that pithy quote, others, too, will find interest in this catalog of experts and the boundless range of hang-ups for which they offer services, including "moral development," "executives," "mergers and acquisitions," "pets," "toys," "computer addiction," and "altruism," among more traditional topics, such as "couples," "family relations," and "obesity."

Order from: American Psychological Association, Public Affairs, 750 First St. NE, Washington, DC 20002; tel. 202/336-5700; fax 202/336-5708.

From the International Food Policy Research Institute (IFPRI):

Hidden Harvest: US Benefits From International Research Aid (17 pp., no charge), says big reductions in US aid for third-world agricultural research are uncharitable as well as shortsighted, since US domestic agriculture has prospered greatly from relatively small American contributions. Cited in the report are plant varieties developed by the 16 worldwide research centers supported by the Consultative Group on International Agricultural Research, which received about 12 percent of its 1995 \$335 million budget from the US government. Noting research by the International Maize and Wheat Improvement Center, in Mexico, and the Rice Research Institute, in the Philippines, the report estimates that the US economy has "realized a return of up to \$14.7 billion" in benefits from the \$134 million in US contributions since 1960. IFPRI, founded in 1975, is supported by numerous international, national and private organizations worldwide. Philip G. Pardey, an IFPRI research fellow, was lead author of the report.

Order from: IFPRI, 1200 17th St. NW, Washington, DC 20036-3006; tel. 202/862-5600; fax 202/467-4439; e-mail: cifpri@cgnet.com.

From the National Cancer Institute:

Cancer Rates and Risks (NIH Publication No. 96-691; 205 pp., no charge), first edition in over a decade, presents statistics on incidence, mortality and survival rates by age, site, race, gender, etc., with recent trends, comparisons drawn from 50 countries and bibliographic references. The accompanying text is written in "lay language for science writers, public health officials, and the interested public," according to an NCI press release, which suggests that the volume "could also be useful to scientists who want to communicate information about cancer risk factors to the general public."

Order from: National Cancer Institute, Office of Communications, Building 31, Room 10A-16, Bethesda, Md. 20892; tel. 1-800/4-CANCER.

From the General Accounting Office (GAO), no charge:

CDC's National Immunization Survey: Methodological Problems Limit Survey's Utility (GAO/PEMD-96-16; 46 pp.), raises questions about the accuracy of the National Immunization Survey of infants and children, which the Centers for Disease Control and Prevention conducts by telephone, unlike the face-to-face National Health Interview Survey. Noting the risks of gaps in coverage by the immunization survey, the GAO says it has "serious concerns about its utility and efficiency." The report was requested by Senator Dale Bumpers (D-Ark.)

Terrorism and Drug Trafficking: Technologies for Detecting Explosives and Narcotics (GAO/NSIAD/RCED-96-252; 27 pp.), says useful but cumbersome technologies have resulted from \$246 million in federal R&D expenditures since 1976 for detecting explosives and \$100 million for narcotics. "Some technologies are very effective and could be deployed now," the GAO states, "but they are expensive, slow the flow of commerce, and raise issues of worker safety. Others could be widely used, but are less reliable." The report briefly describes dozens of detection technologies, their operational status, the federal agencies involved and the amount of funding they have provided for research.

Order from: USGAO, PO Box 6015, Gaithersburg, Md. 20884-6015; tel. 202/512-6000; fax 202/258-4066.

From the Federation of American Scientists (FAS):

Perspectives on the Long-Term Global Food Situation (6 pp., no charge), quarterly newsletter, discussing ag research, economics, national policies, etc., produced by Pierre Crosson, a Senior Fellow at Resources for the Future, in association with the FAS Long-Term Global Food Project. Founded in 1945 by alumni of the atom-bomb project, the FAS describes itself as "a national organization of natural and social scientists and engineers dedicated to the responsible use of science and technology."

Order from: Federation of American Scientists, 307 Massachusetts Ave. NE, Washington, DC 20002; tel. 202/546-3300; fax 202/675-1010.

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In Print

Official reports and other publications of special interest to the research community

(Copies of publications listed here are available from the indicated sources—not from SGR)

From the White House, National Science and Technology Council (NSTC), no charge:

Our Changing Planet: The FY 1997 US Global Change Research Program—An Investment in Science for the Nation's Future (162 pp.), a report to Congress on the sprawling program, budgeted by the White House for FY '97 (which begins today) for \$1.7 billion, spread among 12 federal agencies. NASA is the big one, taking up about 70 percent of the total, mostly for the Earth Observation Satellite program. The report, by the NSTC Subcommittee on Global Change Research, chaired by Robert Corell of the National Science Foundation, summarizes the objectives and programs of the participating agencies and also provides budget data, past and hoped-for.

Order from: Global Change Research Information Office User Services, 2250 Pierce Rd., University Center, Michigan 48710; tel. 517/797-2730; fax 517/797-2622; e-mail: <help@gcrio.org>.

Program Guide to Federally Funded Environment and Natural Resources R&D (46 pp.), covers all the agencies and programs in the subject fields, for which federal funding in 1994 is placed at \$5.1 billion, over half awarded to universities and other non-federal organizations. Contacts at the agencies are given for each entry. The *Guide*, announced by the White House Office of Science and Technology Policy last month, bears a June 1996 date on the cover and lists application closing dates that expired several months ago, but most of the programs and people are still there for the 1997 application season.

Order from: Committee on Environment and Natural Resources Executive Secretary, National Oceanic and Atmospheric Administration, Office of Policy and Strategic Planning, Department of Commerce, Washington, DC 20230; tel. 202/482-5917; fax 202/482-1156.

From the Department of Commerce, Partnership for a New Generation of Vehicles (PNGV), no charge:

PNGV Technical Accomplishments (70 pp.), summarizes developments in the Administration's program to develop super-efficient, clean and competitive vehicles in a collaboration of Ford, GM, Chrysler and a slew of government research agencies. The report ranges over a variety of fields—materials, welding, fuel cells, etc.—and lists contacts for further information. ***Inventions Needed for PNGV*** (52 pp.) summarizes work still to be done toward the goal, and lists the programs of the participating federal agencies, application deadlines, etc.

Order from: US Department of Commerce, PNGV Secretariat, Room 4845, Washington, DC 20230; tel. 202/482-6260; fax 202/482-6275.

From the National Academy of Sciences:

Linking Science and Technology to Society's Environmental Goals (501 pp., pre-publication, \$65 plus \$4 for shipping; available in December "at lesser cost"), a mountainous production spawned in 1992 by the since-disbanded Carnegie Commission on Science, Technology, and Government, which, dedicated to interminable schmoozing and protracted prescriptions, recommended that "A non-governmental National Forum on Science and Technology Goals should be established to facilitate the process of defining, debating, focusing, and articulating science and technology goals in the context of federal, national, and international goals, and to monitor the development and implementation of policies to achieve them."

Help was provided along the way by the Carnegie bankroll, the Academy, the White House Office of Science and Technology Policy, and scores of specialists of one kind or another, meeting several times on the usual topics: economics and risk assessment, environmental monitoring and ecology, chemicals in the environment, energy, industrial ecology, and population.

Under the subheading "An Innovative Approach," an introductory passage explains that "A key difference between this report and others that have discussed the issue of the environment, is that this document is not based on an analysis of the literature, empirical analysis of the costs and benefits of various actions, etc., but, as befits its charge, is based on the judgements of the committee after hearing comments in the forum, via the call for comments, and on its own deliberations." Co-chairs of the enterprise are John F. Ahearne, Director of the Sigma Xi Center, and H. Guyford Stever, doyen of the Washington science-policy establishment. Deborah D. Stine of the Academy staff served as Study Director.

Order from: National Academy Press, 2101 Constitution Ave. NW, Washington, DC 20418; tel. 1-800/624-6242 or 202/334-3313.

Assessment of Performance Measures In Public Health: Phase I Report (120 pp., no charge), a draft report in response to a 1995 request from the Department of Health and Human Services for advice on establishing performance measures for state management of federally assisted programs in mental health, substance abuse, HIV infection, sexually transmitted diseases, tuberculosis, immunization and other aspects of public health. The report describes criteria that the states and federal government can use for negotiating Performance Partnership Grants and for monitoring outcomes. A workshop was held in Washington October 1 to discuss the report, which was produced by the NAS Panel on Performance Measures and Data for Public Health Performance Partnership Grants, chaired by Edward B. Perrin, University of Washington School of Public Health and Community Medicine. Jeffrey Koshel of the Academy staff was study director.

Order from: National Academy of Sciences, Committee on National Statistics, 2101 Constitution Ave. NW, Harris Building, Room 192, Washington, DC 20418; tel. (202) 334-3754; fax (202) 334-3751.

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